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EXAMINER	
VU, TUAN A	

ART UNIT	PAPER NUMBER
2193	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/607,593	FATHALLA, DIAA	
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/27/03*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/14/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to the application filed 6/27/2003.

Claims 1-26 have been submitted for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

> The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a " useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

Specifically, claim 1 recites a API replay tool for creating API calls, comprising a symbol table for mapping memory references and a call builder for creating API call code sequence. As gathered from the specifications (Specifications, Fig. 2 and related text), the symbol table and the call builder are software entities or tool enabling the creation of API call code sequence; and software entities claimed without hardware embodiment to support the realization of the functionality (e.g. mapping memory references into a space, creating a code sequence according to the mapping), the claim amounts to software entities merely listed as descriptive functional elements, and that without reasonable possibility that their functionality can be realized via execution, absent of any hardware machine to enable such execution in order to yield real world

results. Thus, the claim amounts to a non-practical application, and is rejected for failing to reasonably conveying the realization of a action leading to concrete, useful, and tangible result.

Claims 1 and dependent claims 2-10, (e.g. manager of claim 2 is also software entity) for not providing of hardware support, are rejected for leading to non-statutory subject matter.

Claims Objections

4. Claim 19 is objected to because of the following informalities: the reciting of 'the computer-executable instructions facilitating performing ...' needs to be readjusted so the language construct in that context provides only one action, either *performing*, or *facilitating* the steps of. Besides, the use of 'facilitating' does not seem appropriate when the intent (as construed from the Specifications) is that the instructions are implemented to perform the steps, not just facilitating. Claims 19 and dependent claims 20-23 are to be corrected to put forth the real purpose of the code instructions.

Appropriate corrective action is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

> The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-9, 11-17, 19-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Ringseth et al., USPN: 6,625,804 (hereinafter Ringseth).

> The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

As per claim 1, Ringseth discloses application program interface (API) call replay tool for creating and submitting API calls based upon input API call records, the tool comprising:

a symbol table for mapping references (e.g. symbol table 430 – Fig. 4) within an input API call record (*UEPM source* - Fig. 5; Fig. 7-8) into a memory space allocated to the API call replay tool (e.g. Fig. 3; Table 1- col. 8; event framework – Fig. 3; col. 6, line 40 to col. 7, line 60; Table 2 – col. 9; *state 434, Attribute provider 470* – Fig. 4; Fig. 7, 8a); and

an API call builder for creating an API call code sequence (e.g. *_interface* -Fig. 10A-B) for invoking an API call corresponding to the input API call record (e.g. step 524→528; step 570 --Fig. 5; Fig. 6), wherein memory references within the API call code sequence are specified according to the mapping entries within the symbol table (e.g. step 528 – Fig. 5; col. 11, lines 49-57; col. 12, line 41 to col. 13, line12)

As per claim 2, Ringseth discloses managing memory block per context of call records (namespace – Fig. 7, 8a; namespace N – Fig. 10b; *source events, receiving events* – Table 1, Table 2 – col. 8, col. 9)

As per claim 3, Ringseth discloses firing of asynchronous event and handlers as needed, resulting in managing of events as received(or as thread identified) as in multi or single thread implementation (see col.7, lines 11-45)

As per claim 4, Ringseth discloses execution template for maintaining set of resources associated with input API call record (e.g. col. 12, lines 60-65; col. 14; *template* – col. 14, lines 17-26; state 434 – Fig. 4; col. 22, *ATL template code* – Note: state information from compiler parsing and establishing events in a information state to be used by the Attribute provider reads on set of resources; and template ATL reads on set of resources associated with events being parsed)

As per claim 5, Ringseth discloses a API call executioner showing code sequence and set of resources (e.g. Fig. 4-5; Fig 6a-6b)

As per claim 6, Ringseth discloses event handlers within the tool to render a API call (see - Fig. 17, 18a-b, 19; *delegate ... event handlers* - in related text)

As per claim 7, Ringseth discloses handlers providing callback (e.g. *callback* – col. 6, lines 45-52; Fig. 15c; Fig. 8a; col. 23, lines 43 to col. 24, line 28 – Note: unhooking reads on callback functions; see Fig. 19)

As per claims 8-9, Ringseth discloses references as pointers and variables (col. 8, lines 41-56; Attribute provider – Fig. 4; events, allocation for variables – col. 12, lines 10-47; col. 15, *V-Function Pointer-Based Eventing protocol implementation*; Fig. 7).

As per claim 11, Ringseth discloses a method for replaying API calls comprising

mapping references (within a API call record ... space allocated to an API call replay tool);

creating API call code sequence ... memory references are specified ... mapping entries); all of which limitations being included in the subject matter claimed in claim 1. Hence, the claim is rejected using the corresponding rejection as set forth therein.

As per claims 12-17, these claims correspond to claims 2-5, 8-9, respectively; hence are rejected using the corresponding rationale as set forth therein, respectively.

As per claim 19, this claim is a computer-readable medium version of claim 11 and includes the same subject matter recited therein; hence is rejected using the corresponding rejection as set forth therein.

As per claims 20-25, these claims correspond to claims 2-5, 8-9, respectively; hence are rejected using the corresponding rationale as set forth therein, respectively.

7. Claims 1, 10-11, 18-19, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Chong et al., USPubN: 2003/0208743 (hereinafter Chong).

As per claim 1, Chong discloses application program interface (API) call replay tool for creating and submitting API calls based upon input API call records, the tool comprising:

a symbol table for mapping references (e.g. Fig. 11) within an input API call record (Workflow input file – Fig. 6b; Input file – Fig. 11; para 0113, pg. 8) into a memory space allocated to the API call replay tool (e.g. Model analyzer 114 – Fig. 11; Workflow - Fig. 12, Fig. 6b; internal model 206– Fig. 8; Fig. 9; para 0193-0195, pg. 13); and

an API call builder for creating an API call code sequence (e.g. para 0055, pg. 4; Actions – Fig. 12; *action ...new object that implements ... interfaces* – para 0197, pg. 13; para 0200, 0212, 0221, 0255, 0290) for invoking an API call corresponding to the input API call record (e.g. Workflow input – Fig. 6B), wherein memory references within the API call code sequence are specified according to the mapping entries within the symbol table (e.g. Fig. 11, Fig. 17).

As per claim 10, Chong discloses passing assembly language instructions (para 0038 – pg. 3).

As per claim 11, Chong discloses a method for replaying API calls comprising

mapping references (within a API call record ... space allocated to an API call replay tool);

creating API call code sequence ... memory references are specified ... mapping entries); all of which limitations being included in the subject matter claimed in claim 1. Hence, the claim is rejected using the corresponding rejection as set forth therein.

As per claim 18, refer to rejection of claim 10.

As per claim 19, this claim is a computer-readable medium version of claim 11 and includes the same subject matter recited therein; hence is rejected using the corresponding rejection as set forth therein.

As per claim 26, refer to claim 18.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan A Vu whose telephone number is (272) 272-3735. The examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-3735 (for non-official correspondence – please consult Examiner before using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-272-3609.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan A Vu
Patent Examiner,
Art Unit 2193
July 31, 2006